REMARKS

Claims 1, 12, 19, 24, 34, 40, 42, 43, and 48 are amended. Claims 1-52 remain in the application for consideration. In view of the following remarks, Applicant respectfully requests withdrawal of the rejections and forwarding of the application to issuance.

The Rejections

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,999,932 to Paul in view of U.S. Patent No. 6,199,102 to Cobb.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 5,459,717 to Mullan.

Claims 7-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 6,072,942 to Stockwell.

Claims 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Cobb and U.S. Patent No. 6,199,103 to Sakaguchi.

Claims 12-15, 24-27, 29, 30, 33-36, 38, 40 and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Stockwell and Sakaguchi.

Claims 16, 23, 31, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb and Stockwell, Sakaguchi and Mullan.

Claims 17 and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Stockwell, Sakaguchi and U.S. Patent No. 5,911,776 to Guck.

Claims 18, 28, and 39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Stockwell, Sakaguchi and Paul.

Claims 19-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakaguchi in view of Stockwell.

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakaguchi in view of Stockwell and Guck.

Claim 42 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Sakaguchi.

Claims 43-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cobb in view of Sakaguchi and Stockwell.

Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakaguchi in view of Cobb, Stockwell, and Mullan.

Claim 47 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakaguchi in view of Cobb and Stockwell (U.S. Patent No. 6,144,934) in further view of Stockwell (U.S. Patent No. 6,072,942).

Claim 48 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Sakaguchi.

Claim 49 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Sakaguchi and Stockwell.

Claim 50 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Sakaguchi in further view of Cobb.

Claim 51 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Sakaguchi and Mullan.

Claim 52 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Paul in view of Sakaguchi and Guck.

Applicant's Disclosure

Applicant's disclosure is directed to email filtering methods and systems. Various embodiments are specifically directed to systems that are focused on the server side of the equation, rather than on the client side. In these types of systems, email servers provide the bulk of the functionality that a client sees when the client enters the email environment. For example, email messages, records, passwords, user preferences, address lists, and the like are all saved on the server side in storage locations that are dedicated for each recipient. Recipients or clients must then typically log in with the server and run a browser program that lets them work within the email system to read their messages. Logging in with the server is typically accomplished over a computer network such as the Internet, and through the use of a suitable web browser. The email environment is generated by the server through the use of HTML or web pages that present the recipient or client with a screen that looks like an email box. All email messages are delivered using the web page format. Microsoft's Hotmail service is an exemplary system.

Email is a tremendously fast and efficient way to send electronic messages. One of the problems that plagues the efficient use of email, particularly in the context of server-side systems, is the growing presence of unwanted and unsolicited emails. These emails are typically referred to as "spam." Spam can include unsolicited commercial emails (UCE) or non-commercial emails. Spam is a menace that clogs email systems, slows down performance, and severely impacts the manner in which email services are provided by an email server to its clients.

From an operational standpoint, UCE or spam can consume vast amounts of disk space and can monopolize many other machine resources. For example, in

Applicant's Fig. 1 example, when an email message is received by server system 22, a copy for each intended recipient is made and placed into the dedicated storage location for each recipient. In the illustrated example, processor 24 receives a spam message and makes a copy of the spam message for each of the intended recipients, i.e. recipients 28, 30 and 32. If a large number of recipients are specified by the sender, then a large amount of server memory can be consumed by replicating the message and placing it in each dedicated storage location for each specified recipient.

From a customer service standpoint, system administrators are often at a loss to combat the delivery of spam to their individual clients. This can and often does result in large numbers of complaints and bounced email messages. Additionally, customers often do not wish to even receive certain types of morally or otherwise offensive emails. Yet, because the spammers (those who promulgate spam) predominate, innocent clients continue to be bombarded with unwanted email messages. From a legal standpoint, valuable time and resources are wasted in pursuing spammers because of the various havoc they wreak on network systems. Needless to say, spam continues to plague those who are in the business of providing email services to clients.

Accordingly, various embodiments of the claimed subject matter are directed to addressing the problems caused by spam and other unwanted emails in the context of a server-side email system. As explained below, the claims have been amended to focus with more particularity on the context in which various inventive embodiments are employed. However, before discussing the particular claim amendments, a brief discussion of the cited references is given in an attempt

to provide an appreciation of the differences between the cited references and the claimed subject matter.

The Primary References to Paul, Cobb and Sakaguchi

The reference to **Paul** discloses a system for eliminating unsolicited electronic mail that generates and stores a user inclusion list including identification data for identifying e-mail desired by the user. Data from one or more fields of incoming electronic mail messages are compared with the identification data stored in the user inclusion list. If the electronic mail message data matches corresponding identification data from the user inclusion list, the e-mail message is marked with a first display code, such as "OK." If no match is detected, the system performs at least one heuristic process to determine whether the electronic mail message may be of interest to the user. If the message satisfies one or more criteria as determined by the heuristic process and is therefore of potential interest to the user, the message is marked with a second display code, such as "NEW." If the e-mail message does not satisfy any of the heuristic criteria, the e-mail message may be marked with a third display code, such as "JUNK." The processed e-mail messages are displayed to the user in a display mode corresponding to the display codes respectively assigned to the messages.

Paul's invention is described in the context of a user terminal software system (see Fig. 1) for eliminating unsolicited e-mail. The user terminal software system is a *client-side system* and includes an inclusion list manager 102 that creates, stores and automatically maintains a user inclusion list. The user inclusion list includes all identification data needed to determine the status of

incoming e-mail messages. The user inclusion list may be created and maintained automatically and also modified manually by the user.

The *user terminal software system* of Fig. 1 is described to further include an e-mail storage database 106 that receives and stores incoming e-mail and stores records of outgoing e-mail. An e-mail filter 104 filters the incoming e-mail stored in store 106 in accordance with the user inclusion list stored in database 102. A user interface 108 receives inputs from the user and displays e-mail information to the user. The user interface 108 may be used, for example, to display a user's mailbox, receive and process e-mail messages and inputs from the user, manage the user's mailbox, and display mailbox management information to enable the user to manage the mailbox.

The e-mail filter 104 filters incoming mail received in the user's e-mail store 106 based upon three fields of data contained in the incoming e-mail, the "FROM" field, the "TO" field and the "SUBJECT" field. Filtering may also include the "CC" field and the "BCC" field to filter e-mail messages on which the user is listed as a CC or BCC recipient rather than a direct recipient.

Paul describes, in Fig. 3, a so-called server embodiment. There, the server enables filtering to be performed at a central location for all users within a network such as a *local area network* (LAN). As depicted in Fig. 3, an e-mail server 301 receives and routes e-mail messages to and from a plurality of users such as A, B, C, and D attached to an electronic data network 300. The e-mail server may also receive e-mail from other networks 315. The e-mail server 301 includes an e-mail server message store 306 for receiving and storing all e-mail messages transmitted within the network 300 and an e-mail filter 304. An inclusion list processor 302 stores and maintains at least one inclusion list for each e-mail address that is

serviced by the e-mail server 301. For example, in the network configuration depicted in Fig. 3, the inclusion list processor 302 maintains a separate user inclusion list for each user A, B, C and D. The operation of the components of the e-mail server 301 shown in Fig. 3 is similar to the corresponding components in the user terminal system of Fig. 1.

The *Cobb* reference discloses a system and method for filtering unsolicited electronic commercial messages. The disclosed system screens out unsolicited commercial messages by receiving the message from a sender, sending a challenge back to the sender, receiving a response to the challenge, and determining if the response is a proper response. Cobb's system appears to be a predominately *client-side system*. Cobb's Fig. 2 shows a block diagram of networking system with which the disclosed invention can work. The Internet system 50 is shown to include mail servers 52a-52c which utilize the standard protocol of Simple Mail Transfer Protocol (SMTP). A message 54 can be sent via one of the SMTP servers, such as the server 52a. The message may be passed through several servers before reaching its final destination, in this example, the server 52c. Once the message is received by the destination receiver 52c, then it is typically sent to a mailbox 56, such as a Post Office Protocol box (POP) or Internet Message Access Protocol box (IMAP) where it is held pending retrieval by an Email Client Program 60. During message retrieval, the message can be filtered through the Message Filter Program 58. Cobb discloses that the Message Filter 58 can be located between the Mailbox 56 and the user's Email Client Program 60 (as is illustrated); as part of mailbox servers such as Mailbox 56, or in the Email Client Program 60 which actually processes the user's messages.

The **Sakaguchi** reference discloses a system that can generate determination conditions and determine whether email is junk email based on one determination condition. The system comprises a junk electronic mail determination processing section for determining whether or not a given electronic mail piece, through an input section, is junk based on the determination condition stored in a junk electronic mail determination condition storage section. An estimated junk electronic mail storage section stores the electronic mail piece if the electronic mail piece is determined to be junk. A junk electronic mail exemplification learning section analyzes content information of the electronic mail piece stored in the storage section and extracts a feature amount to determine that electronic mail is junk, and adds the extracted feature amount to the junk electronic mail determination condition storage section as a junk electronic mail determination condition. A keyword vector is used as the determination condition.

Fig. 6 shows an exemplary computer system that is suitable for practicing the embodiments described by Sakaguchi. The Fig. 6 system is a personal computer which suggests a purely *client-side solution*. Furthermore, the nature of the problem that Sakaguchi addresses, as specified in its "Background" section, is that of a "conventional electronic mail reception unit" (see, e.g. column 1, lines 9-18).

The Secondary References

The secondary references used in the Office's combination, and which are not discussed above, are the references to Stockwell (Patent Nos. 6,072,942 and 6,144,934), Mullan, and Guck.

The reference to *Stockwell (the '942 patent)* discloses a system and method for filtering electronic mail messages. A message is received and processed through a one or more filter flows. Each filter flow is comprised of one or more self-contained nodes which can be combined in whatever order is required to *enforce a given security policy.* Node independence provides a policy-neutral environment for constructing filter flows. A filter flow may be as simple as forwarding the mail to the intended recipient, or may perform one or more checks where it decides whether to forward, reject, return (or some combination thereof) the message. Certain node types are also able to append information on to a mail message, while others are able to modify certain parts of a mail message. Several of the node types are able to generate audit or log messages in concert with processing a mail message.

The reference to *Stockwell (the '934 patent)* discloses an electronic message filtering system and method in which a message is received as input to a filter and decomposed into a set of components. The set of components is then processed through a pattern matching algorithm to determine if the message contents contain patterns inherent in a specified pattern, such as a natural language. The results of the pattern match analysis are output by the filter.

The reference to *Mullan* discloses a method and apparatus for routing a message embodied in a signal received by an electronic messaging system. The method includes formatting a search key using address codes parsed from a user address specified in the message, where each of the address codes corresponds to a different level of specificity for the user address. An attempt is made to retrieve a record from a database of routing information using the search key. If no record is found, the address code corresponding to the most detailed level of specificity in

the user address is stripped from the search key and another attempt is made to retrieve a record. This process continues until a record is successfully retrieved from the database or a predetermined base level of specificity is reached.

The reference to *Guck* discloses a network providing a server using an object-database that enables an author to create and store an original document, as a source file with a first format. Software in the data base provides multiple sets of shadow file-converter groups connected to the source file of the original document. Each shadow file-converter set enables the transformation of the original source file format into a particular other specific type of format. A client or user of the network can access and receive a copy of the original source document which is automatically reformatted to match the requirements of the receiver's appliance. Thus, one original source document can be created and then published in any specific format to multiple numbers of and types of receiving appliances.

The Claim Amendments

Claim 1 recites an email filtering method and has been amended to more specifically focus on the context in which the inventive embodiments are employed. In accordance with the recited method, at least one heuristic is defined that determines whether an incoming email message likely constitutes unsolicited commercial email by considering an established pattern that such unsolicited commercial email typically exhibits when it is sent. The recited heuristic is applied to at least one email message. This claim has been amended recite that the email message to which the heuristic is applied is one <u>that is received by a *web server* that comprises part of a *web-based email system* in which, for at least some</u>

users of the system, *a client user interface email environment is generated through use of HTML or web pages*. Support for this feature is provided in the specification, particularly on page 1, lines 15-25 through page 2, lines 1-15. Additionally, a specific commercial embodiment in which the inventive method can be practiced is disclosed starting on page 21, line 20. In accordance with the recited method, at least one email message is redirected if application of the heuristic indicates that the email message likely constitutes unsolicited commercial email.

In making out the rejection of this claim, the Office argues that Paul discloses an email filtering system as recited, but does not disclose the redirection feature which is provided by Cobb. In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. None of the references cited by the Office disclose or suggest an email filtering method in which at least one heuristic is applied to an email message *that is received by a web server that comprises part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages.* Accordingly, for at least this reason, claim 1 is allowable.

Claims 2-11 depend either directly or indirectly from claim 1 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 1, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

In addition, with respect to those claims that are rejected in further view of Mullan, Stockwell, and Sakaguchi, those references are not seen to add anything of significance given the amendment to claim 1.

Claim 12 recites an email filtering method. In accordance with the recited method, an email message is received at an email server that maintains inboxes for individual recipients. The email message is addressed to a plurality of recipients. This claim has been amended to recite that *the email server comprises part of an Internet-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages.* In accordance with the recited method, a score is calculated for the email message at the server location based upon at least one of (a) the size of the email message, and (b) the number of specified recipient addresses. The score is compared with a threshold value that defines a likelihood of whether an email message constitutes an unwanted email message. Responsive to the email message exceeding the threshold value, a copy of the email message is placed at a first location other than any of the intended recipients' inboxes. A notification is sent to the intended recipients that a copy of an email message that was intended for them has been placed at the first location.

In making out the rejection of claim 12, the Office argues that the combination of Cobb and Stockwell teach the recited subject matter except for calculating a score based on the patterns and comparing this score to a threshold which, if exceeded, places the email in a location and sends a notification to the intended recipient. The Office then argues that Sakaguchi teaches the missing feature. In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant

traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest receiving an email message at an email server, where the *email server comprises part of an Internet-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages.* Accordingly, for at least this reason, this claim is allowable.

Claims 13-18 depend from claim 12 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 12, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

In addition, with respect to those claims that are rejected in further view of Mullan, Guck and Paul, those references are not seen to add anything of significance given the amendment to claim 12.

Claim 19 recites a computer program stored on one or more computer readable media for processing email and comprising the steps of receiving an email message at a server location, wherein the email message being addressed to a plurality of recipients. This claim has been amended to recite that *the server location comprises one or more servers that comprise part of an Internet-based email system in which, for at least some users of the system, a client user interface email environment is generated by the system through use of HTML or web pages that are sent via the Internet to client devices and used by a browser executing on a client device to render the user interface email environment.*

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses

the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claims 20-23 depend from claim 19 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 19, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

In addition, with respect to those claims that are rejected in further view of Mullan and Guck, those references are not seen to add anything of significance given the amendment to claim 19.

Claim 24 recites a programmed email server that contains computer-readable instructions which, when executed by the email server, perform steps comprising determining whether an email message that is received by the email server likely constitutes an unwanted email message. This claim has been amended to recite that *the email server comprises part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices.*

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claims 25-33 depend from claim 24 either directly or indirectly and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited

in claim 24, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

In addition, with respect to those claims that are rejected in further view of Paul and Mullan, those references are not seen to add anything of significance given the amendment to claim 24.

Claim 34 recites an email screening method. In accordance with the recited method, a profile of unsolicited commercial email is developed based upon the size of an email message and the number of specified recipient addresses of the email message. A mail server that is responsible for storing and distributing email messages to a plurality of clients is configured with a filter processor that is programmed to evaluate email messages that are received in light of the developed profile. This claim has been amended to recite that the mail server *comprises part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices.*

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claims 35-39 depend either directly or indirectly from claim 34 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 34, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

In addition, with respect to those claims that are rejected in further view of Guck and Paul, those references are not seen to add anything of significance given the amendment to claim 34.

Claim 40 recites an email delivery method. In accordance with the recited method, a bulk email folder is established in which bulk email is to be stored. An email server is configured to receive email messages and deliver them either to multiple server storage locations that are dedicated to storing email messages for respective recipients or to a single, shared location that can be shared by a plurality of the recipients. This claim has been amended to recite that *the email server comprises part of an email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices.*

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claim 41 depends from claim 40 and is allowable as depending from an allowable base claim. This claim is also allowable for its own recited features which, in combination with those recited in claim 40, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

Claim 42 recites an email screening method. In accordance with the recited method, a profile of unwanted email messages is developed based upon whether an email message is similar in content to another email message. A mail server that is responsible for storing email messages for a plurality of clients is

configured with a filter processor that is programmed to evaluate email messages that are received in light of the developed profile. This claim has been amended to recite that *the mail server comprises part of an email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices*.

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claim 43 recites an email screening method. In accordance with the recited method, an index is defined having values that are assigned to various degrees of desirability that an email message can have. The degrees of desirability are recited to extend from a low degree of desirability to a high degree of desirability. A plurality of parameters having parameter values are associated with the various degrees of desirability and at least some of the parameters do not depend on any message that is conveyed by any content of an email message. A user interface is established through which a user can adjust either (a) individual parameter values that, in turn, establish a degree of desirability, or (b) index values that themselves establish a degree of desirability that email messages must have in order to be saved to dedicated user storage locations. This claim has been amended to recite that a computing device is used to evaluate incoming email messages against the index value that is defined by the user. The computing device is specified to *comprise part of an email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices*.

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claims 44-47 depend from claim 43 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 43, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

Claim 48 recites an email server system comprising a user storage database configured to store user information including email messages that are intended for individual users. A server is configured to receive email messages that are intended for various users and store the email messages in dedicated user storage locations within the user storage database. The server is further configured to screen email messages based upon a set of heuristics that determine whether an email message likely constitutes an unwanted email message and places a single copy of an email message in a storage location that is not a dedicated user storage location if it is determined by screening the email message that it likely constitutes an unwanted email message. This claim has been amended to recite that *the system comprises an Internet-based system that is configured to send email messages to users in a format in which a user's browser application processes the email messages and provides a user interface for a user to view the email messages*.

In view of the amendment of this claim which more particularly focuses on the context in which the inventive embodiments are employed, Applicant traverses

the Office's rejection. Specifically, none of the references cited by the Office disclose or suggest this feature. Accordingly, this claim is allowable.

Claims 49-52 depend from claim 48 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 48, are neither disclosed nor taught by the references of record, either singly or in combination with one another.

Conclusion

All of the claims are in condition for allowance and Applicant respectfully requests a Notice of Allowability be issued forthwith. If the next anticipated action is to be anything other than issuance of a Notice of Allowability, Applicant respectfully requests a telephone call for the purpose of scheduling an interview.

Version of the Claims with Markups to Show Changes

1.   (Amended) An email filtering method comprising:

defining at least one heuristic that determines whether an incoming email message likely constitutes unsolicited commercial email by considering an established pattern that such unsolicited commercial email typically exhibits when it is sent;

applying said at least one heuristic to at least one email message that is received by a web server that comprises part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages; and

redirecting said at least one email message if application of said at least one heuristic indicates that said at least one email message likely constitutes unsolicited commercial email.

12.   (Amended) An email filtering method comprising:

receiving an email message at an email server that maintains inboxes for individual recipients, wherein the email message is addressed to a plurality of recipients, the email server comprising part of an Internet-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages;

calculating a score for the email message at the server location based upon at least one of (a) the size of the email message, and (b) the number of specified recipient addresses;

comparing the score with a threshold value that defines a likelihood of whether an email message constitutes an unwanted email message;

responsive to the email message exceeding the threshold value, placing a copy of the email message at a first location other than any of the intended recipients' inboxes; and

sending a notification to the intended recipients that a copy of an email message that was intended for them has been placed at the first location.

19.   (Amended) A computer program stored on one or more computer readable media for processing email, the program comprising the following steps:

receiving an email message at a server location, the email message being addressed to a plurality of recipients, the server location comprising one or more servers that comprise part of an Internet-based email system in which, for at least some users of the system, a client user interface email environment is generated by the system through use of HTML or web pages that are sent via the Internet to client devices and used by a browser executing on a client device to render the user interface email environment;

placing only one copy of the email message at a first storage location that is not a dedicated storage location for just one of the intended recipients; and

notifying each of the intended recipients that an email message intended for them has been placed at the first location.

24.   (Amended) A programmed email server that contains computer-readable instructions which, when executed by the email server, perform the following steps:

determining whether an email message that is received by the email server likely constitutes an unwanted email message, the email server comprising part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices; and

if the email message likely constitutes an unwanted email message:

storing a copy of the email message at a first storage location rather than individual storage locations that are dedicated to individual intended recipients of the email message; and

notifying intended recipients of the email message that an email message addressed to them has been received by the server.

34.   (Amended) An email screening method comprising:

developing a profile of unsolicited commercial email based upon the size of an email message and the number of specified recipient addresses of the email message;

configuring a mail server that is responsible for storing and distributing email messages to a plurality of clients with a filter processor that is programmed to evaluate email messages that are received in light of the developed profile, the mail server comprising part of a web-based email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices;

evaluating email messages with the filter processor and determining whether the email messages fit the developed profile; and

if an email message fits the developed profile, initiating a remedial measure that ensures that the mail server does not make as many copies of the email message as there are specified recipient addresses.

40.   (Amended) An email delivery method comprising:

establishing a bulk email folder in which bulk email is to be stored;

configuring an email server to receive email messages and deliver them either to multiple server storage locations that are dedicated to storing email messages for respective recipients or to a single, shared location that can be shared by a plurality of the recipients, the email server comprising part of an email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices;

receiving an email message;

comparing an address for the sender of the email message with a recipient's list of approved senders; and

delivering the email message to the single, shared location if: (a) the email message is not directly addressed to a recipient that is serviced by the server, and (b) the sender's address does not appear in the recipient's list of approved senders.

42.   (Amended) An email screening method comprising:

developing a profile of unwanted email messages based upon whether an email message is similar in content to another email message;

configuring a mail server that is responsible for storing email messages for a plurality of clients with a filter processor that is programmed to evaluate email

messages that are received in light of the developed profile, the mail server comprising part of an email system in which, for at least some users of the system, a client user interface email environment is generated through use of HTML or web pages that are sent to client devices;

evaluating email messages with the filter processor and determining whether the email message fits the developed profile; and

if the email message fits the developed profile, placing a copy of the email message in a first location and, rather than placing multiple copies of the email message in multiple dedicated client storage locations, notifying the multiple clients that an email message addressed to them has been received so that the clients can read the email message if they so desire.

43.   (Amended) An email screening method comprising:

defining an index having values that are assigned to various degrees of desirability that an email message can have, wherein the degrees of desirability extend from a low degree of desirability to a high degree of desirability;

associating a plurality of parameters having parameter values with the various degrees of desirability, wherein at least some of the parameters do not depend on any message that is conveyed by any content of an email message; and

establishing a user interface through which a user can adjust either (a) individual parameter values that, in turn, establish a degree of desirability, or (b) index values that themselves establish a degree of desirability that email messages must have in order to be saved to dedicated user storage locations; and

evaluating, using a computing device comprising part of an email system in which, for at least some users of the system, a client user interface email

environment is generated through use of HTML or web pages that are sent to client devices, incoming email messages against the index value that is defined by the user.

48.   (Amended) An email server system comprising:

a user storage database configured to store user information including email messages that are intended for individual users; and
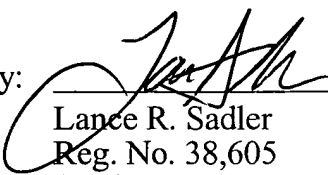
a server configured to receive email messages that are intended for various users and store the email messages in dedicated user storage locations within the user storage database;

wherein the server is further configured to screen email messages based upon a set of heuristics that determine whether an email message likely constitutes an unwanted email message, the server further being configured to place a single copy of an email message in a storage location that is not a dedicated user storage location if it is determined by screening the email message that it likely constitutes an unwanted email message, said system comprising an Internet-based system that is configured to send email messages to users in a format in which a user's browser application processes the email messages and provides a user interface for a user to view the email messages.

Respectfully Submitted,

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